

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

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Claims 1-76 (Canceled)

77. (Currently Amended) A cable having a central axis, the cable comprising:

a plurality of twisted pairs of conductors; and

a jacket defining a central passage in which the twisted pairs of conductors are located, the central passage including air, the air in the central passage occupying a volume between the plurality of twisted pairs of conductors, the jacket including legs that project inwardly toward the central axis of the cable, the jacket defining channels located between the legs, the channels including air, the air in the channels being in fluid communication with the air in the central passage that occupies the volume between the plurality of twisted pairs of conductors, each of the channels having two opposing sides, a side interconnecting the two opposing sides, wherein the side interconnecting the two opposing sides forms discretely identifiable corners with the opposing sides, and an open side that faces inwardly toward the central axis, the channels having lengths that run along a length of the jacket, and the number of channels being greater than the number of twisted pairs of conductors.

78. (Previously Presented) The cable of claim 77, wherein the plurality of twisted pairs of conductors includes 4 twisted pairs of conductors.

79. (Previously Presented) The cable of claim 77, wherein each of the conductors is covered by a separate insulation layer.

80. (Previously Presented) The cable of claim 77, wherein the twisted pairs of conductors generally do not occupy the channels.

81. (Previously Presented) The cable of claim 77, wherein the channels each have a cross-sectional area of at least .00002 square inches.

82. (Previously Presented) The cable of claim 77, wherein the jacket has a thickness less than about .030 inches.

83. (Previously Presented) The cable of claim 77, wherein the jacket comprises a plastic material.

84. (Previously Presented) The cable of claim 83, wherein the plastic material includes a fluoropolymer.

85. (Previously Presented) The cable of claim 83, wherein the plastic material includes polyvinyl chloride.

86. (Currently Amended) A cable comprising:

a plurality of twisted pairs of conductors; and

a jacket within which the twisted pairs of conductors are located, the jacket defining interior air channels, the channels defining legs thereinbetween that project inwardly toward a central axis of the jacket, the legs being attached to the jacket at outer ends and the legs having free, unattached inner ends, each channel having two opposing sides, a side interconnecting the two opposing sides, wherein the side interconnecting the two opposing sides forms discretely identifiable corners with the opposing sides, and an open side that faces inwardly toward the central axis of the jacket, the channels having lengths that run along a length of the jacket, and the number of channels being greater than the number of twisted pairs of conductors.

87. (Previously Presented) The cable of claim 86, wherein the twisted pairs of conductors include 4 twisted pairs of conductors.

88. (Previously Presented) The cable of claim 86, wherein each of the conductors is covered by a separate insulation layer.

89. (Currently Amended) A data transmission cable comprising:

~~a plurality of twisted~~ four or fewer twisted pairs of data transmission conductors; and

a jacket within which the plurality of twisted pairs of data transmission conductors is located, the jacket defining interior channels that are circumferentially spaced relative to one another about the plurality of twisted pairs of data transmission conductors, the channels defining legs thereinbetween that project inwardly toward a central axis of the jacket, the legs being attached to the jacket at outer ends and the legs having free, unattached inner ends, the channels each having an open side that faces inwardly toward the central axis of the jacket, the twisted pairs of data transmission conductors generally not occupying the channels; and a separator positioned within the jacket ~~for separating the twisted pairs of data transmission conductors.~~

90. (Previously Presented) The cable of claim 89, wherein the plurality of twisted pairs of data transmission conductors includes 4 twisted pairs of data transmission conductors.

91. (Previously Presented) The cable of claim 89, wherein each of the data transmission conductors is covered by a separate insulation layer.

92. (Previously Presented) The cable of claim 89, wherein number of channels is greater than the number of twisted pairs of data transmission conductors.

93. (Previously Presented) The cable of claim 89, wherein the channels are generally rectangular in cross-sectional shape.

94. (Previously Presented) The cable of claim 89, wherein each of the channels has a cross-sectional area less than about 30 percent of a total cross-sectional area of the jacket.

95. (Previously Presented) The cable of claim 89, wherein the cable includes an inner portion surrounding the plurality of data transmission conductors and an outer portion surrounding the inner portion, the inner portion including the channels such that a composite density of the inner portion is less than a composite density of the outer portion.

96. (Previously Presented) The cable of claim 95, wherein a signal speed at the inner portion is at least 2% greater than a signal speed at the outer portion.

97. (Previously Presented) The cable of claim 95, wherein a signal speed at the inner portion is at least 5% greater than a signal speed at the outer portion.

98. (Previously Presented) The cable of claim 95, wherein a signal speed at the inner portion is at least 10% greater than a signal speed at the outer portion.

99. (Previously Presented) The cable of claim 90, wherein the plurality of twisted pairs of data transmission conductors are twisted around each other to define a core having diameter less than about .25 inches.

100. (Currently Amended) A data transmission cable comprising:

~~a plurality of twisted~~ four or fewer twisted pairs of data transmission conductors; and

a jacket defining an interior passage that extends along a length of the jacket, the interior passage including a central region including air and a peripheral region, the plurality of twisted pairs of data transmission conductors being positioned within the central region, the air in the central region occupying a volume between the plurality of twisted pairs of conductors, the peripheral region of the interior passage including a plurality of channels that are circumferentially spaced relative to one another about the central region of the interior passage,

the channels including air, the air in the channels being in fluid communication with the air in the volume of the central region between the twisted pairs of conductors, the number of channels being greater than the number of twisted pairs of conductors; and a separator positioned within the jacket ~~for separating the twisted pairs of data transmission conductors.~~

101. (Previously Presented) The cable of claim 100, wherein the plurality of twisted pairs of data transmission conductors includes 4 twisted pairs of data transmission conductors.

102. (Previously Presented) The cable of claim 100, wherein each of the data transmission conductors is covered by a separate insulation layer.

103. (Previously Presented) The cable of claim 100, wherein the plurality of twisted pairs of data transmission conductors are twisted around each other to define a core having diameter less than about .25 inches.

104. (Currently Amended) A data transmission cable comprising:

four or fewer twisted pairs of data transmission conductors, each of the data transmission conductors being covered by a separate insulation layer, the four or fewer twisted pairs of data transmission conductors ~~being twisted around each other to define~~ defining a core; and

a jacket defining an interior air passage that extends along a length of the jacket, the interior air passage having a central region including air and a peripheral region including air, the core being located within the central region of the interior air passage with the core being exposed to the air in the central region, the peripheral region of the interior air passage including a plurality of channels that are circumferentially spaced relative to one another about the core, the channels including air, the air in the channels being in fluid communication with the air in the central region to which the core is exposed, the jacket including an inner portion at which the channels are defined and an outer portion that surrounds the inner portion, the number of channels being greater than the number of twisted pairs of insulated data transmission conductors; and a separator positioned within the jacket.

105. (Previously Presented) The cable of claim 104, wherein each of the channels has a cross-sectional area less than about 30 percent of a total cross-sectional area of the jacket.

106. (Previously Presented) The cable of claim 104, wherein a signal speed at the inner portion is at least 2% greater than a signal speed at the outer portion.

107. (Previously Presented) The cable of claim 104, wherein a signal speed at the inner portion is at least 5% greater than a signal speed at the outer portion.

108. (Previously Presented) The cable of claim 104, wherein a signal speed at the inner portion is at least 10% greater than a signal speed at the outer portion.

109. (Previously Presented) The cable of claim 104, wherein the channels each have a cross-sectional area of at least .00002 square inches.

110. (Previously Presented) The cable of claim 104, wherein the jacket has a thickness less than about .030 inches.

111. (Previously Presented) The cable of claim 104, wherein the jacket comprises a plastic material.

112. (Previously Presented) The cable of claim 111, wherein the plastic material includes a fluoropolymer.

113. (Previously Presented) The cable of claim 111, wherein the plastic material includes polyvinyl chloride.

114. (Currently Amended) A data transmission cable comprising:
~~a plurality of twisted~~ four or fewer twisted pairs of data transmission conductors; and

a jacket defining a single passage with a central region in fluid communication with a peripheral region, the ~~plurality of~~ four or fewer twisted pairs of data transmission conductors being positioned within the central region, the jacket including an inner portion and an outer portion, the inner portion of the jacket including a plurality of projections that project inwardly from the outer portion of the jacket, the projections having inner unattached ends that define an outer boundary of the central region of the passage, the jacket defining air channels between the projections, the air channels each being visible when the data transmission cable is viewed in transverse cross-section, the air channels forming the peripheral region of the passage, the number of air channels being greater than the number of twisted pairs of conductors; and a separator positioned within the jacket ~~for separating the twisted pairs of conductors~~.

115. (Previously Presented) The cable of claim 77, wherein the channels are generally rectangular in cross-sectional shape.

116. (Previously Presented) The cable of claim 86, wherein the channels are generally rectangular in cross-sectional shape.

117. (Previously Presented) The cable of claim 100, wherein the channels are generally rectangular in cross-sectional shape.

118. (Previously Presented) The cable of claim 104, wherein the channels are generally rectangular in cross-sectional shape.

119. (Previously Presented) The cable of claim 114, wherein the channels are generally rectangular in cross-sectional shape.

120. (Currently Amended) The cable of claim 79, wherein the plurality of insulated conductors has an overall dielectric constant of less than 2.0.

121. (Previously Presented) The cable of claim 79, wherein the insulation layer defines channels exposed to the conductor and also includes closed channels that are not exposed to the conductor.

122. (Currently Amended) The cable of claim 79, wherein the insulated conductor has a diameter of less than about .042 inches.

123. (Currently Amended) The cable of claim 79, wherein the separate insulation layer has a thickness of less than about .01 inches.

124. (Previously Presented) The cable of claim 77, wherein the plurality of twisted pairs of conductors includes first and second twisted pairs of conductors each having a separate insulation layer with channels, a cross-sectional area of the channels of the first pair being different than the cross-sectional area of the channels of the second pair.

125. (Previously Presented) The cable of claim 77, wherein the cable complies with a test selected from the group consisting of The National Fire Prevention Association 255, The National Fire Prevention Association 259, The National Fire Prevention Association 262 or combinations thereof.

126. (New) The cable of claim 77, wherein the jacket includes at least six of the channels.

127. (New) The cable of claim 77, wherein a shape of at least one of the channels is selected from the group consisting of rectangular, trapezoidal and arched.

128. (New) The cable of claim 77, wherein the plurality of twisted pairs of conductors are twisted around each other to define a core, the core including an element selected from the group consisting of a copper conductor, insulation, a shield, a separator and combinations thereof.

129. (New) The cable of claim 77, wherein the jacket is extruded through the use of an extrusion tip that includes a bore and a number of radially arranged grooves that extend along a

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longitudinal axis of the extrusion tip, wherein, during the extrusion process, the conductors are fed through the bore and the grooves create legs defining the channels of the jacket.